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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,476	09/29/2005	Peter Gammon Johns	MSX-103(PCT/US)	4430
47670 7590 05/27/2009 KELLEY DRYE & WARREN LLP 400 ATLANTIC STREET, 13TH FLOOR STAMFORD, CT 06901				
EXAMINER				
MC GINTY, DOUGLAS J				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
05/27/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/551,476

**Applicant(s)**

JOHNS ET AL.

**Examiner**

DOUGLAS MC GINTY

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) 20-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 11-14-05 & 9-29-05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Applicants' election of Group I in the reply filed on May 14, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Accordingly, claims 1-10 are examined herein as falling within Group I. Claims 11-19 have been cancelled. Claims 20-23 have been withdrawn as non-elected.

***Claim Objections***

Claims 5-8 and 10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n).

Accordingly, the claims 5-8 and 10 are objected to but are still examined to the extent understood in order to advance prosecution. Those claims should be corrected in response to this Office Action.

Claims 1-9 are objected to because of typographical errors.

Claims 1-9 should have -- thioglycolate -- instead of "thioglycollate".

Claim 5, line 2, should have -- alkyl -- instead of "allyl".

Claim 8, line 4, has the misspelling "solubilzse".

Claims 20-23 were omitted from the set of claims provided on May 15, 2009.

This omission is not material at this point because claims 20-23 have been withdrawn from further consideration. Still, those claims should be included in the response to this Office Action.

***Claim Rejections - 35 USC § 112***

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 is unclear as to whether the anionic and nonionic surfactants are both required for each of the alkanethiol, alkyl thioglycolate, and dialkyl sulfide choices. In order to examine the claims as completely as possible and expedite prosecution, claim 8 is construed as requiring the anionic and nonionic surfactants only when the dialkyl disulfide is chosen. The claims are given the broadest reasonable interpretation during examination. See MPEP 2111 and 2173.06.

No new matter should be added when amending the claims.

***Claim Rejections - 35 USC §§ 102 and 103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following citations are made for the convenience of the reader, but the rejections are based on the references as a whole. Depending on the type of reference, designations such as "(1:2)" refer to page 1, line 2, or column 1, line 2. Where appropriate, designations such as "(1a:2)" refer to page 1, first column, line 2.

Claims 1-4 and 6-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Thornton (GB 1,130,540).

Thornton teaches a method for treating the surface of a silver alloy (1:38-47) wherein the surface is treated with at least one material selected from an alkanethiol such as stearyl mercaptan or an alkyl thioglycolate such as cetyl thioglycolate (2:16-38 and 55-75). Organic solvents such as trichloroethylene may be used (2:4). The alkanethiol or alkyl thioglycolate is contained in a vat (polish) (2:39-52). Detergent (surface active agent) is added during a subsequent washing step (2:67-75).

In view of the foregoing, Thornton is found to be anticipatory. Claims 1-4 and 6-10 also would have been obvious over the teachings of Thornton because that reference pertains to the method of treating silver alloys with a solution of alkanethiol or alkyl thioglycolate.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton (GB 1,130,540) as applied to claims 1-4 and 6-10 above, and further in view of either or both Clark (US 5,616,549) and Shubkin (US 6,165,284).

With respect to claim 5, Thornton teaches a variety of organic solvents including trichloroethylene (1:54-2:5), but it does not appear to specifically teach use of the solvent n-propyl bromide.

Clark teaches that n-propyl bromide may be used as a solvent in place of trichloroethylene (3:19-33). The n-propyl bromide offers the advantage of lower ozone depletion (3:7-15).

Shubkin teaches the use of n-propyl bromide as a solvent for treating silver surfaces to inhibit tarnishing (Title; and Abstract). The compound is known to be environmentally friendly (1:14-16).

It would have been obvious for the method of treating silver surfaces, as taught by Thornton, with the solvent of n-propyl bromide, as taught by Clark and/or Shubkin. Thornton teaches use of the trichloroethylene solvent and Clark teaches that n-propyl bromide may be substituted for that solvent as a ozone-safe alternative. Shubkin also teaches that n-propyl bromide may be used as an environmentally friendly solvent for treating silver surfaces to inhibit tarnishing.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton (GB 1,130,540) in view of either or both Clark (US 5,616,549) and Shubkin (US 6,165,284), and further in view of Smith (US 3,398,003).

Thornton recognized that alkanethiols and alkyl thioglycolates can be used to inhibit tarnishing for silver alloy surfaces. However, Thornton, Clark, and Shubkin do not appear to teach the use of (di)alkyl disulfides for the same purpose.

Smith teaches that (di)alkyl disulfides may be used to inhibit tarnishing in silver (Abstract). Various other components may be added, such as diluents and detergents (1:48-64). Interestingly, Smith further teaches that the (di)alkyl disulfides result from the partial oxidation of alkanethiols (alkyl mercaptans) (2:22-64).

It would have been obvious for the method of treating silver alloys, as taught or suggested by Thornton, Clark, and Shubkin, to have (di)alkyl disulfide as an equivalent in the solution, as taught by Smith, because Thornton, Shubkin, and Smith pertain to the

treating of silver-containing surfaces to prevent tarnishing. The prior art recognized that alkanethiols, alkyl thioglycolates, and (di)alkyl disulfides all can be used for the same purpose of inhibiting tarnish for silver-containing surfaces. MPEP 2144.06.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS MC GINTY whose telephone number is (571)272-1029. The examiner can normally be reached on M-F, 830-500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOUGLAS MC GINTY/  
Primary Examiner, Art Unit 1796